

## REMARKS

The claims in the case are claims 2 - 14. Claim 1 has been canceled. The claims were amended in the preliminary examination. The claims have been amended further to eliminate multiple dependency and to put them in better form for U.S. filing. No new matter is included.

Favorable action is solicited.

Respectfully submitted,

KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'H B Keil', written in a cursive style.

Herbert B. Keil  
Reg. No. 18,967

1350 Connecticut Ave., N.W.  
Washington, D.C. 20036

(202)659-0100

## CLAIMS 53368

1. (canceled)
2. (original) A method for identifying herbicidally active substances, comprising the following steps:
  - a) bringing one or more enzymes selected from the group consisting of the enzymes tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase into contact with one or more test substances under conditions which permit the binding of the test substance(s) to one of the abovementioned enzymes or to the nucleic acid sequence which encodes one of the abovementioned enzymes; and
  - b) detecting if the test substances reduce or block the transcription, translation or expression of at least one of the abovementioned enzymes; or
  - c) detecting whether the test substances reduce or block the activity of at least one of the abovementioned enzymes; or
  - d) detecting whether the test substance binds to one of the abovementioned enzymes.
3. (currently amended) A method as claimed in ~~claim 1~~ claim 2, wherein the test compound
  - a) is treated with a plant cell lysate which comprises at least one of the enzymes tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase or
  - b) with at least one of the enzymes tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase which are either partially or

## CLAIMS 53368

- fully purified, and
- c) the enzymatic activity of at least one of the abovementioned enzymes is subsequently determined in comparison with the activity of at least one of the abovementioned enzymes which has/have not been treated with a test compound, those chemicals compounds which reduce or block the activity of at least one of the abovementioned enzymes being selected.
4. (currently amended) A method as claimed in claim 2 or 3, wherein tryptophan aminotransferase is employed as the enzyme.
5. (original) A method as claimed in claim 2, wherein tryptophan or a triptophan derivative is employed as substrate and the enzymatic activity in step (c) is determined via
- a) the decrease in L-tryptophan; or
  - b) the increase in indole-3-pyruvate; or
  - c) the increase in indole-3-acetaldehyde; or
  - d) the increase in indole-3-acetic acid; or
  - e) the increase in indole--3--butyric acid; or
- a combination of at least two of the methods (a) to (e).
6. (original) A method as claimed in claim 2, wherein indole--3-pyruvate or an indole--3-pyruvate derivative is employed as the substrate and the enzymatic activity in step (c) is determined via
- a) the decrease in indole-3-pyruvate; or
  - b) the increase in indole-3-acetaldehyde; or

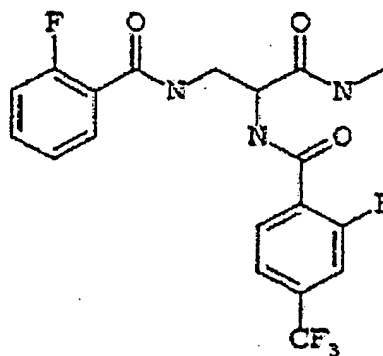
CLAIMS 53368

- c) the increase in indole-3-acetic acid; or
  - d) the increase in indole-3-butyric acid; or
  - e) a combination of at least two of the methods (a) to (d).
7. (original) A method as claimed in claim 2, wherein indole-3-acetaldehyde or an indole-3-acetaldehyde derivative is employed as the substrate and the enzymatic activity in step (c) is determined via
- a) the decrease in indole-3-acetaldehyde; or
  - b) the increase in indole-3-acetic acid; or
  - c) a combination of methods a) and b).
8. (currently amended) A method as claimed in claim 2 ~~one of claims 2 to 7~~, wherein the enzymatic activity is determined spectroscopically.
9. (currently amended) A method as claimed in claim 2 ~~any of claims 2 to 8~~, wherein the substances are identified in the form of a high-throughput-screening.
10. (currently amended) A method as claimed in claim 2 ~~any of claims 2 to 9~~, wherein the compound selected by means of the method is applied to a plant to verify the herbicidal activity.
11. (currently amended) ~~The use of compounds with herbicidal or growth-regulatory activity~~ A method for controlling undesired vegetation, said method comprising applying a compound with herbicidal growth-regulatory activity to the vegetation, wherein the ~~compounds inhibit~~ compound inhibits one or more compound selected from the group consisting of the enzymes tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase.

CLAIMS 53368

12. (currently amended) The use method as claimed in claim 11, wherein the compounds compound with herbicidal or growth-regulatory activity are is formulated with the aid of adjuvents which are suitable for the formulation of agricultural compositions.

13. (original) The compound of the formula (I)



14. (currently amended) ~~The use of compounds as claimed in claim 13~~ A method for controlling undesired vegetation, said method comprising applying the compound as claimed in claim 13 to the vegetation.